

Weigh up the pros and cons of ACL injury treatment options

Treatment cost

ACL reconstruction surgery

ACL surgery costs more than rehab without surgery. This cost will vary depending on your health insurance. Lower cost ACL surgery is offered in the public system in Australia but usually has long waiting list times of between 12-18 months.

Rehab without surgery

If you are satisfied with the outcome from rehab without surgery, your total costs will be less than for ACL surgery (depending on your health insurance).

If you decide to have surgery after trying rehab, you'll need to pay for both the costs of the rehab and then the costs of surgery and post operative rehab.

Risk of surgical complications

ACL reconstruction surgery

ACL surgery comes with a risk of serious and less serious surgical complications. The surgeon's choice of techniques and devices can affect the outcomes and risks.

Serious complications (0.7%)

E.g. myocardial infarction (<.01%), stroke (<.01%), pulmonary embolism (0.1%), infection requiring surgery (0.5%), fasciotomy (.02%), neurovascular injury (.02%), death (.01%)



Bleeding complications, post surgery blood loss, blood transfusion, injury to an artery



Deep vein thrombosis: 9.7%, pulmonary embolism: 0.1%, pseudaneurysms: 0.3%



Tibial cyst (3.9%), abscess, cyclops lesion (swelling, pain, tenderness, instability)



Knee joint contracture: restricted movement (2-43%), stiffness (3%) and pain



Infection, allergic and foreign body reactions, poor wound healing: infection rate varies (2-11%) depending on type of screws/staples



Implant breakage, migration and failure



Rehab without surgery

By choosing rehab without surgery, you avoid potential surgical complications. But if you end up deciding to have surgery later, then there is still the risk of serious surgical complications.

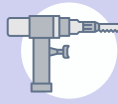
Graft site complications: patellar fracture (0.4-1.3%), hamstring retraction, reduced strength/size, anterior knee pain (15-81%), kneeling pain (10-57%)



Nerve damage (sensory loss): 40-80% of hamstring grafts



Bone tunnel widening, fracture of bone due to bone drilling, tunnel malpositioning, thermal necrosis



Septic arthritis (0.4-2.1%), chronic inflammation of joint structures, cellulitis



Pain medication and general anaesthetic complications: e.g. nausea, vomiting, sedation, postdural puncture, headache, sweating, dizziness



Graft failure or rupture, surgical revision



Knee stability

ACL reconstruction surgery

A successful outcome from ACL reconstruction surgery will mean that your knee feels stable and you regain full movement once recovered from surgery.

An unsuccessful outcome can include an unstable knee or restricted knee movement.

Rehab without surgery

A successful outcome from rehab without surgery will mean that your knee feels stable and you regain full movement once you complete rehab.

Some people still have knee instability (knee collapsing or giving way under them) after trialling rehab. For these people, there is a risk of damage to other parts of the knee. In this case, surgery is recommended to prevent further knee damage.

Length of recovery

ACL reconstruction surgery

The length of rehab is typically 12-18 months after ACL surgery.

Some people may take longer to recover or may not fully recover if they are not happy with the results of the surgery.

Rehab without surgery

Rehab without surgery can also take around 12 months, but some people may recover faster.

If you decide to have surgery after trying rehab, this will delay your total recovery, as you will now face 12 months of post-operative rehab.

Avoiding knee surgery

ACL reconstruction surgery

You will have knee surgery under a general anaesthetic and may stay the night in hospital.

Rehab without surgery

If you are satisfied with your outcome from rehab without surgery, you will avoid knee surgery.

If you go onto have ACL surgery after trying rehab, you will have knee surgery under a general anaesthetic and may stay the night in hospital.

Potential for natural healing of the ACL

ACL reconstruction surgery

The torn ACL is removed during ACL reconstruction surgery, meaning that there's no chance of the ACL healing in the future.

Rehab without surgery

During rehab without surgery, there is potential for natural healing of the torn ACL which may result in better outcomes.

If you go onto have ACL surgery after trying rehab, the torn ACL will be removed, which will prevent the possibility of ACL healing in the future.

Satisfaction with knee function

ACL reconstruction surgery

About half of people are satisfied with their knee function two years after ACL surgery, or two years after rehab without surgery.

Rehab without surgery

About half of people are satisfied with their knee function two years after ACL surgery, or two years after rehab without surgery.

Convenience

ACL reconstruction surgery

Some people may prefer to have ACL surgery as they prefer to be able to book in for it at a particular time of year (i.e. during the holidays). This will depend on the availability of surgery.

ACL surgery will result in some time of pain, swelling, poor function and being restricted in what the knee can do. After the surgery, you will need to walk with crutches and will not be able to drive for up to six weeks.

Rehab without surgery

If you are satisfied with your outcome after rehab without surgery, you will avoid the acute post-surgical limitations. You should also be able to walk without crutches and drive once the knee pain and swelling has settled (usually 1-2 weeks).

If you go on to have ACL surgery after trying rehab without surgery, you will have some time of increased pain, swelling, poor function and activity restrictions after surgery.

Muscle strength and function

ACL reconstruction surgery

In a successful surgical outcome, you should regain at least 90% of your thigh muscle strength.

On the other hand, muscle weakness and reduced muscle control can persist beyond 12 months of ACL reconstruction surgery. You may also have pain or weakness where the graft is taken from.

Rehab without surgery

A successful outcome from rehab without surgery should include getting back at least 90% of your thigh muscle strength.

If you decide to have ACL reconstruction surgery later on, improving knee strength and function through rehab before having surgery can improve your result from surgery.

Further knee injury

ACL reconstruction surgery

If you have ACL reconstruction surgery there is a risk of rupturing the ACL graft, which can lead to poor long-term outcomes. Further injuries to other parts of the knee can also occur.

Rehab without surgery

The risk of further knee injuries is similar whether you choose rehab without surgery or ACL surgery. You can not rupture your ACL graft if you don't have surgery, but ACLs that heal naturally can rupture again.

If you decide to have ACL reconstruction surgery later on, there is a risk of re-rupturing the graft and poor long-term outcomes.

Return to sport

ACL reconstruction surgery

In a successful surgical outcome, you should regain at least 90% of your thigh muscle strength.

On the other hand, muscle weakness and reduced muscle control can persist beyond 12 months of ACL reconstruction surgery. You may also have pain or weakness where the graft is taken from.

Rehab without surgery

A successful outcome from rehab without surgery should include getting back at least 90% of your thigh muscle strength.

If you decide to have ACL reconstruction surgery later on, improving knee strength and function through rehab before having surgery can improve your result from surgery.

Knee osteoarthritis (OA)

ACL reconstruction surgery

More knee swelling and cartilage changes occur after ACL reconstruction surgery. ACL surgery may lead to higher rates of knee OA, as seen on x-ray. But it's important to know, that having a knee x-ray that shows OA doesn't mean that you'll have any knee pain and symptoms. Few studies have compared rates of painful OA between treatment groups.

Rehab without surgery

Some studies found fewer signs of OA on x-ray in people who chose rehab without surgery following ACL injury. But not everyone with OA seen on x-ray has knee pain and symptoms. There are not yet enough studies to say if rates of painful knee OA differ between ACL surgery and rehab without surgery.